

Calidris maritima (Purple Sandpiper)

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Aves (Birds)

Order: Charadriiformes (Plovers, Sandpipers, And Allies)

Family: Scolopacidae (Curlews, Dowitchers, Godwits, Knots, Phalaropes, Sandpipers, Snipe, Yellowlegs, And Woodcock)

General comments:

Recent surveys suggest population undergoing steep population decline within 10 years. IFW surveys conducted in 2014 suggest population declined by 49% since 2004 (IFW unpublished data). Maine has high responsibility for wintering population, regional surveys suggest Maine may support over 1/3 of the Western Atlantic wintering population. USFWS Region 5 and Canadian Maritimes winter at least 90% of the Western Atlantic population.

Species Conservation Range Maps for Purple Sandpiper:

Town Map: [Calidris maritima Towns.pdf](#)

Subwatershed Map: [Calidris maritima HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines:

Purple Sandpiper is currently undergoing steep population declines, which has already led to, or if unchecked is likely to lead to, local extinction and/or range contraction.

Notes:

Recent surveys suggest population undergoing steep population decline within 10 years. IFW surveys conducted in 2014 suggest population declined by 49% since 2004 (IFW unpublished data). Maine has high responsibility for wintering population

Regional Endemic:

Calidris maritima's global geographic range is at least 90% contained within the area defined by USFWS Region 5, the Canadian Maritime Provinces, and southeastern Quebec (south of the St. Lawrence River).

Notes:

Recent surveys suggest population undergoing steep population decline within 10 years. IFW surveys conducted in 2014 suggest population declined by 49% since 2004 (IFW unpublished data). Maine has high responsibility for wintering population

High Regional Conservation Priority:

United States Birds of Conservation Concern:

Bird of Conservation Concern in Bird Conservation Regions 14 and/or 30: Yes

High Climate Change Vulnerability: NA

Understudied rare taxa: NA

Historical: NA

Culturally Significant: NA

Habitats Assigned to Purple Sandpiper:

| Formation Name | Cliff & Rock |
|----------------|--------------|
|----------------|--------------|

| | |
|-----------------|-------------|
| Macrogroup Name | Rocky Coast |
|-----------------|-------------|

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|----------------------|------------------------------------|----------------------------|-----------------|
| Habitat System Name: | Acadian-North Atlantic Rocky Coast | **Primary Habitat** | Notes: roosting |
|----------------------|------------------------------------|----------------------------|-----------------|

| Formation Name | Intertidal |
|----------------|------------|
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|-----------------|--------------------|
| Macrogroup Name | Intertidal Bedrock |
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|----------------------|-----------------|----------------------------|----------------|
| Habitat System Name: | High Intertidal | **Primary Habitat** | Notes: feeding |
|----------------------|-----------------|----------------------------|----------------|

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Formation Name Intertidal

Habitat System Name: Low-Intertidal ****Primary Habitat**** **Notes:** feeding

Habitat System Name: Mid-Intertidal ****Primary Habitat**** **Notes:** feeding

Macrogroup Name Intertidal Mollusc Reefs

Habitat System Name: Gastropod Reef

Habitat System Name: Mussel Reef

Stressors Assigned to Purple Sandpiper:

| Stressor Priority Level based on Severity and Actionability | Moderate Severity | | High Severity | |
|---|----------------------------|--|---------------|--|
| | Highly Actionable | | Medium-High | |
| | Moderately Actionable | | Medium | |
| | Actionable with Difficulty | | Low | |

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Fishing and Harvesting of Aquatic Resources

Severity: Moderate Severity **Actionability:** Highly actionable

Notes: Activities can alter habitat and behavior

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity **Actionability:** Highly actionable

Notes: Need to determine cause of current population declines in order to reverse current declines.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Industrial and Military Effluents

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Impacts may be mitigated through oil spill clean up and compensation. Prevention may occur through contingency planning and environmental permit review.

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Severe **Actionability:** Actionable with difficulty

Notes: Habitat loss from sea level rise may be mitigated by conservation of upland areas that will allow for intertidal areas to migrate inland. Impacts to intertidal invertebrate prey base may occur from ocean acidification.

IUCN Level 2 Threat: Temperature Extremes

Severity: Moderate Severity **Actionability:** Actionable with difficulty

Notes: Impacts to intertidal invertebrate prey base may occur due to increasing ocean temperatures.

Species Level Conservation Actions Assigned to Purple Sandpiper:

**Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

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Conservation Action **Category:** Habitat Management **Biological Priority:** critical **Type:** on-going
Continue to work with the Maine Department of Marine Resources to coordinate macroalgae harvest in important wintering sites and determine the level of impact on wintering birds

Stressor(s) Addressed By This Conservation Action

Fishing and Harvesting of Aquatic Resources

Conservation Action **Category:** Survey and Monitoring **Biological Priority:** critical **Type:** on-going
Continue annual long term monitoring plan to determine if the Purple Sandpiper population is in severe decline. Combine annual survey with a coastwide survey to be conducted every 5 years.

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Actions Associated with the Shorebirds Guild:

Conservation Action **Category:** Survey and Monitoring **Biological Priority:** high **Type:** on-going
Identify and map priority feeding and roosting areas including offshore habitats, and implement protection initiatives. Enter data in IFW ETSC database.

Stressor(s) Addressed By This Conservation Action

Lack of knowledge, Industrial and Military Effluents, Housing and Urban Areas, Tourism and Recreational Areas, Commercial and Industrial Areas

Conservation Action **Category:** Species Management **Biological Priority:** high **Type:** new
Place symbolic stake and twine fencing around important beach roosting areas with signage to identify roosting areas.

Stressor(s) Addressed By This Conservation Action

Recreational Activities, Tourism and Recreational Areas

Conservation Action **Category:** Research **Biological Priority:** high **Type:** on-going
Work with the Maine Department of Marine Resources to conduct research to determine the impact of macroalgae harvest on wintering waterfowl

Stressor(s) Addressed By This Conservation Action

Fishing and Harvesting of Aquatic Resources

Conservation Action **Category:** Public Outreach **Biological Priority:** high **Type:** on-going
Provide outreach to pet owners, beachgoers, kayakers, beach managers, and landowners to raise public awareness on shorebirds and on the impacts of disturbance from recreational activities in coastal areas.

Stressor(s) Addressed By This Conservation Action

Recreational Activities

Conservation Action **Category:** Habitat Management **Biological Priority:** moderate **Type:** new
Use voluntary agreements, conservation easements, conservation tax abatements and incentives to protect important habitats

Stressor(s) Addressed By This Conservation Action

Work and Other Activities, Recreational Activities, Housing and Urban Areas, Commercial and Industrial Areas

Conservation Action **Category:** Survey and Monitoring **Biological Priority:** high **Type:** on-going
To determine population status continue monitoring program for SGCN shorebird species at high priority migration sites coastwide. Continue to coordinate with ISS, PRISM, Atlantic Flyway ESMP programs.

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Stressor(s) Addressed By This Conservation Action

Lack of knowledge

| Conservation Action | Category: Research | Biological Priority: high | Type: on-going |
|--|--------------------|---------------------------|----------------|
| Identify prey resources in significant staging areas to determine potential limiting factors and optimal management techniques to promote these resources. | | | |

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

| Conservation Action | Category: Research | Biological Priority: high | Type: on-going |
|---|--------------------|---------------------------|----------------|
| Determine length of stay at stopover areas, site fidelity, local movements and premigration condition to determine if coastal habitats are meeting shorebird requirements for successful migration. | | | |

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

| Conservation Action | Category: Research | Biological Priority: moderate | Type: new |
|---|--------------------|-------------------------------|-----------|
| Determine limiting factors for SGCN shorebird species on breeding, migratory, or wintering areas. | | | |

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

| Conservation Action | Category: Research | Biological Priority: high | Type: on-going |
|--|--------------------|---------------------------|----------------|
| Gain a better understanding of the extent and impacts of algae harvesting on staging and wintering shorebirds. Conduct longterm monitoring of ecosystem-wide impacts of cutting algae to determine potential impacts to shorebird habitats and invertebrate pr | | | |

Stressor(s) Addressed By This Conservation Action

Fishing and Harvesting of Aquatic Resources

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.